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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,197	10/29/2003	Dennis C. Parker	03283-PA	7291

7590 08/10/2005

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EXAMINER

SANDERS, KRIELLION ANTIONETTE

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/696,197

Applicant(s)

PARKER ET AL.

Examiner

Kriellion A. Sanders

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/25/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of the species of Group III, claims 3-13 is acknowledged. The traversal is that the invention of Groups I and II and II can be searched together This has not been found to be persuasive because the basis of the restriction is that the inventions are patentably distinct and inventions II and III are related as process of making and product made. The product of Group III is necessarily made by a different invention than that of Group I.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speronello et al. US Patent No. 6432322 in view of Hallo et al US Patent No, 6482473 and Drew et al US Patent No. 5,204,154.

Speronello et al. US Patent No. 6432322 provides for a massive body that rapidly produces a solution of chlorine dioxide when immersed in *water*. The invention also includes the solutions obtained when a massive body is immersed in *water*. As used therein the term "massive body" means a solid shape, preferably a porous solid shape, comprising a mixture of granular particulate ingredients wherein the size of the particles comprising the ingredients is substantially smaller than the size of the massive body. The tablets of the present invention may, if desired, contain optional additional ingredients, which may be useful, for example to assist in the

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tableting process, to improve the physical or aesthetic characteristics of the produced tablets and to assist tablet solubilization and/or the yield of chlorine dioxide obtained. Such ingredients include but are not limited to fillers such as *attapulgitic clay* and sodium chloride. The low solubility porous framework of the preferred composition of the second type of tablet device comprises a low solubility salt such as calcium sulfate and may additionally include a clay such as **Laponite clay**. The calcium sulfate preferably is formed from the reaction between calcium cations e.g., from the calcium chloride constituent and sulfate anions derived from the sodium bisulfate constituent. Other sources of calcium cations such as calcium nitrate as well as other sources of sulfate anions such as *magnesium sulfate* may also be used. See col. 2, line 40 through col. 4, line 67. The inventor does not indicate that the invention is suitable for application wherein flame or fire protection is desired, however the compositions are useful for providing a fire protective coating on surfaces by virtue of the components therein, such components being recognized in the art for providing fire resistance to surfaces as documented by Hallo et al.

Hallo et al US Patent No, 6482473 discloses a process for protecting surfaces from the direct application of concentrated heat and a process for protecting adjacent regions when such heat is applied to high heat transfer materials, said process comprising the steps of:

- a) forming a colloidal suspension gel consisting essentially of a **magnesium silicate** hectorite clay and at least about 85% water by weight;
- b) applying said gel to a surface selected from the group consisting of surfaces of a material to be protected from direct application of heat and surfaces of a high heat transfer material adjacent to

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the area where heat is to be applied;

c) applying heat to said surface whereby said surface or adjacent region is protected against heat damage. The process employs magnesium silicate in the composition in the range from about 5% to about 7% by weight, water in the range of 88% to 94.5% and a surfactant in the range of 0.5% to 5%. An especially preferred clay for purposes of the invention is **laponite** equated with attapulgite by Speronello et al. See col. 2, line 38 through col. 3, line 46.

The ordinary practitioner would have found it obvious to employ 15% of magnesium compound combined with a clay compound and 85% of water in the manner described by Hallo et al, to achieve optimal fire protecting properties..

Drew et al US Patent No. 5,204,154 discloses a flowable, pressure-compensating composition, comprising:

a) a liquid comprising a material selected from the group consisting of glycerin, silicone oil and mixtures thereof in an amount from about 25 weight percent to about 75 weight percent based on the total composition weight;

b) a mineral viscosity-increasing material selected from the group consisting of fumed silica and **attapulgite clay** and mixtures thereof, in an amount from about 2 weight percent to about 30 weight percent based on the total composition weight; and

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c) a flame retardant selected from the group consisting of bicarbonate of soda, *epsom salt* and mixtures thereof, in an amount from about 5 weight percent to about 30 weight percent based on the total composition weight. See claim 28. Since Epsom salt is a recognized flame retardant it is expected that its inclusion in clay containing compositions in amounts ranging from 5-30 wt % would provide fire protection.

The thickness of the fire protective coatings and substrates for which they are suitable is obvious to the art skilled. The aqueous compositions of Speronello are slurries.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kriellion A. Sanders whose telephone number is 571-272-1122. The examiner can normally be reached on Monday through Thursday 6:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kriellion A. Sanders
Primary Examiner
Art Unit 1714

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